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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,049	06/27/2003	Kenichi Hiraoka	239516US0CONT	4138

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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KUHNS, SARAH LOUISE

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/607,049

Applicant(s)

HIRAOKA ET AL.

Examiner

Sarah L. Kuhns

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5-13 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-13 and 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The preamble of claim 21 recites "a process for producing a fresh fish egg product covered with a single membrane" but goes on to include a step of "treating at least one fresh fish egg covered with a double membrane with an aqueous solution." It is not clear from the claim language as to what happens to the second membrane.

### ***Claim Rejections - 35 USC § 103***

Claims 1, 2, 5-13, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, U.S. Patent 3,852,489, in view of Bender, U.S. Patent 5,262,186 and Bedford, U.S. Patent 2,280,024.

In regard to claim 1, Yip discloses a process for producing a fresh fish egg product comprising treating roe with an aqueous alkali solution (column 2, line 50). Yip

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discloses dissolving an alkali in water to produce the aqueous alkali solution (column 4, line 14). Yip further discloses the use of alkali metal sulfites and citrates (column 3, line 17) and also teaches that other water-soluble compounds can be used as well (column 3, line 15). Yip fails to disclose the washing off or neutralizing of the roe. Bender, however, discloses a process for treating fish with an aqueous alkali solution (column 4, line 46) and additionally discloses that the fish can be washed with and/or neutralized with acid following the alkali treatment (column 5, line 45). It would therefore be obvious to wash and/or neutralize the roe to remove the aqueous alkali solution after treatment is complete in order to avoid altering the taste or appearance of the product. Yip fails to disclose the use of the specific alkalis claimed by Applicant. Bedford discloses the use of dry alkalis, such as sodium carbonate, potassium carbonate (column 2, lines 13-17), sodium hydroxide, potassium hydroxides, and alkali salts (column 3, lines 18-25), in the preservation of fish viscera. It would therefore have been obvious to use an alkali known to be an effective preserving agent, as taught by Bedford, in the aqueous alkali solution of Yip, because the use of an alkali solution, instead of a dry alkali, would allow for more uniform exposure of the roe to the preserving agent.

In regard to claim 2, Yip discloses roe from salmon (column 2, line 28).

In regard to claims 5-7, Yip fails to disclose the exact pH of the aqueous alkaline treatment solution. Bender discloses a preferred pH range of 11.6-13.5 (column 4, line 63) and Bedford teaches a pH in excess of 9.0 (column 2, lines 38-43). It would therefore be obvious to use such a pH for the alkali solution in order to ensure that all bacteria present is killed or at least greatly reduced.

In regard to claim 8, Yip discloses a treatment time of about 20 minutes (column 4, line 21).

In regard to claim 9, Yip discloses a treatment temperature of 50-60°F, which is 10-15.6°C (column 4, line 19).

In regard to claim 10, Yip fails to disclose the washing time of the fish product. However, Bender discloses that the fish can be washed with and/or neutralized with acid following the alkali treatment (column 5, line 45). Although Bender does not disclose an exact washing time it would be obvious to wash the fish product until the remaining alkali solution was completely removed. One skilled in the art would have determined the amount of time sufficient to remove the alkali solution by routine experimentation.

In regard to claim 11, Yip fails to disclose the washing of the fish product. Bender discloses washing the fish product with water (column 5, line 46). It would be obvious to wash the fish product with water because water is readily available and will successfully remove or at least dilute the alkali solution remaining on the fish product.

In regard to claims 12, 13 and 16-18, Yip discloses a fresh fish egg product made from treatment with the aqueous alkali solution (column 2, line 36). Yip further discloses a fresh fish egg product wherein the fish eggs are from salmon (column 2, line 36) and the fish product is salted hard roe of salmon (column 2, line 27). Yip fails to disclose the washing off or neutralizing of the roe. Bender, however, discloses a process for treating fish with an aqueous alkali solution (column 4, line 46) and additionally discloses that the fish can be washed with and/or neutralized with acid following the alkali treatment

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(column 5, line 45). It would therefore be obvious to wash and/or neutralize the roe to remove the aqueous alkali solution after treatment is complete in order to avoid altering the taste or appearance of the product. Yip fails to disclose the use of the specific alkalis claimed by Applicant. Bedford discloses the use of dry alkalis, such as sodium carbonate, potassium carbonate (column 2, lines 13-17), sodium hydroxide, potassium hydroxides, and alkali salts (column 3, lines 18-25), in the preservation of fish viscera. It would therefore have been obvious to use an alkali known to be an effective preserving agent, as taught by Bedford, in the aqueous alkali solution of Yip, because the use of an alkali solution, instead of a dry alkali, would allow for more uniform exposure of the roe to the preserving agent.

In regard to claim 21 and 22, Yip discloses a process for producing sujiko (column 2, line 27), which is a fresh egg product covered with a single membrane, comprising treating roe with an aqueous alkali solution (column 2, line 50). Yip discloses dissolving an alkali in water to produce the aqueous alkali solution (column 4, line 14). Yip further discloses the use of alkali metal sulfites and citrates (column 3, line 17) and also teaches that other water-soluble compounds can be used as well (column 3, line 15). Yip fails to disclose the washing off or neutralizing of the roe. Bender, however, discloses a process for treating fish with an aqueous alkali solution (column 4, line 46) and additionally discloses that the fish can be washed with and/or neutralized with acid following the alkali treatment (column 5, line 45). It would therefore be obvious to wash and/or neutralize the roe to remove the aqueous alkali solution after treatment is complete in order to avoid altering the taste or appearance of the product. Yip fails to

disclose the use of the specific alkalis claimed by Applicant. Bedford discloses the use of dry alkalis, such as sodium carbonate, potassium carbonate (column 2, lines 13-17), sodium hydroxide, potassium hydroxides, and alkali salts (column 3, lines 18-25), in the preservation of fish viscera. It would therefore have been obvious to use an alkali known to be an effective preserving agent, as taught by Bedford, in the aqueous alkali solution of Yip, because the use of an alkali solution, instead of a dry alkali, would allow for more uniform exposure of the roe to the preserving agent.

### ***Response to Arguments***

Applicant's arguments filed August 8, 2005 have been fully considered but they are not persuasive.

Applicant first argues that Yip fails to disclose or suggest the washing off or neutralized of the aqueous alkali solution on the treated fish egg(s) or milt. The new grounds of rejection above have addressed this argument. Bender discloses a process for treating fish with an aqueous alkali solution (column 4, line 46) and additionally discloses that the fish can be washed with and/or neutralized with acid following the alkali treatment (column 5, line 45). It would therefore have been obvious to wash and/or neutralize the roe to remove the aqueous alkali solution after treatment is complete. Applicant argues that Bender discloses the fish being treated after they are eviscerated, but in fact Bender teaches that the treatment solution is "applicable to any fish or shellfish from salt or freshwater either in whole, eviscerated, or filleted condition"

(column 4, lines 65-66). Since the treatment of Bender is applicable to whole fish it would follow that it is effective on all parts of the fish including the viscera.

Applicant argues that Bender does not disclose washing fish eggs or milt as claimed. However, as stated above, Bender teaches that the treatment solution is "applicable to any fish or shellfish from salt or freshwater either in whole, eviscerated, or filleted condition" (column 4, lines 65-66). Since the treatment of Bender is applicable to whole fish it would follow that it is effective on all parts of the fish including the viscera.

Applicant next argues that Bender does not suggest the use of the specifically claimed alkali solution, but the Examiner has relied on Bedford for this limitation.

Applicant also states that Bender fails to disclose or suggest the importance of the washing step or the neutralization step. However, it would have been obvious to remove the alkali solution, as taught by Bender, once the treatment had been completed, in order to avoid altering the taste or appearance of the product.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah L. Kuhns whose telephone number is 571-272-1088. The examiner can normally be reached on Monday - Friday from 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached at 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SLK

  
MILTON I. CANO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700